BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Subsidiary Diploma in Land-based Studies Pearson BTEC International Level 3 Foundation Diploma in Horticulture Pearson BTEC International Level 3 Diploma in Horticulture Pearson BTEC International Level 3 Extended Diploma in Horticulture
Unit number and title	Unit 29: Plant Propagation Activities
Learning aim	**A:** Explore the factors affecting successful plant propagation to produce propagation schedules
Assignment title	**Successful Plant Propagation**
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You work for "Plant Nursery" and are responsible for the propagation of plants. The nursery has grown its business and is looking to improve its plant propagation processes, schedules and facilities to be able to meet customer demand. To do this they have asked you to write a report to analyse the appropriate preparation and propagation techniques to meet the requirements of four specified plant species.
Task 1	The plant nursery owner has asked you to produce a **comprehensive written report** for **four** propagated **plant species**, which must include: • **two** plant species **propagated** from **seed** • **two** plant species **propagated** from **vegetation** The report will need to provide the owners with the following information for **each chosen plant species**: • Detailed **analysis** and **assessment** of the **environmental conditions** needed for successful **propagation and establishment**. Consider connections between humidity, temperature regimes, light, gases and gas exchange, growing media, growth regulation, pack or pot size and common pests and diseases. • Detailed **analysis** and **assessment** of the **facilities** needed for successful **propagation and establishment** of each plant. Provide **reasons** on **how physical structures affect** the choice of **propagation method** and **how** the **environment can be changed** depending on physical facilities: o structures e.g. greenhouses, germination rooms, propagations frames o covering and cladding materials e.g. glass, polyethylene, polycarbonate o construction materials e.g. aluminium galvanised iron or steel, wood o Equipment e.g. mist and fog units, heated bins, hot pipe grafting facilities • **Produce** comprehensive **propagation schedules** for

	each selected plant to ensure the successful propagation and establishment. Each schedule should consider: o Accurate timescales and timeline o Reasoning for the resources required o Possible risks and how these will be minimised through contingency planning. Within your report use accurate terminology confidently and consistently.
Checklist of evidence required	A detailed report which analyses and assesses the propagation of 4 different plant species. To include: • two species propagated from seed • two species propagated from vegetation

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
A.D1	Analyse the factors that affect successful propagation, producing comprehensive propagation schedules for the seed and vegetative propagation of specified plants
A.M1	Assess the factors that affect successful propagation, producing detailed propagation schedules for the seed and vegetative propagation of specified plants
A.P1	Explain the environmental conditions and the facilities needed for seed and vegetative propagation of plants
A.P2	Produce simple propagation schedules for the seed and vegetative propagation of specified plants

Sources of information to support you with this Assignment	**Books** Adams, C; Early, M; Brook, J; Bamford, K; Principles of Horticulture: Level 3; Routledge; 2014; ISBN-13: 978-0415859097 Dirr, M. and Heuser, C. (2009). *The reference manual of woody plant propagation*. 2nd ed. Portland: Timber Press. ISBN-13: 978-1604690040 Klein, C. (2010). *Grow your own garden*. London: BBC. ISBN-13: 978-1846078477 MacDonald, P (2014). *Manual of Plant Grafting*. Oregon: Timber Press. ISBN-13: 978-1604694635 Toogood, A. (2019). *RHS propagating plants*. DK. ISBN-13: 978-0241345696 **Journals and Magazines** • Horticulture Week • BBC Gardeners World • Nature (www.nature.com/hortres/) • Horticultural Plant Journal **Websites**

	• rhs.org.uk • hortweek.com • plantpropagation.com